CD Series Triple Output DC/DC Converters

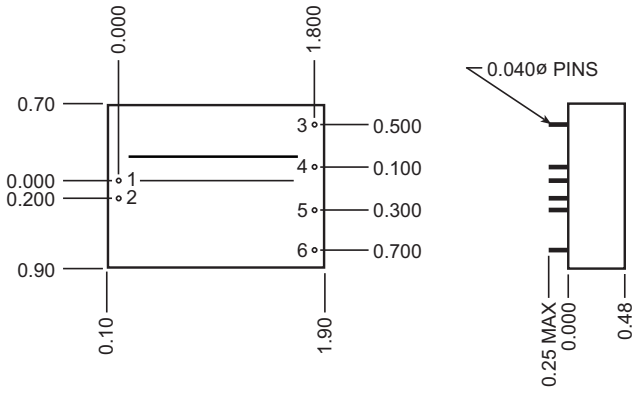
Model 5T5.12CD Specifications

Model		5T5.12CD		
Features		Automotive Application		
Power		9.2 Watts		
Input Parameters				
Voltage Range	min typ max	5.0 VDC 6.5 VDC 14.5 VDC		
Efficiency	typ	75%		
Switching Frequency	typ	100 kHz		
Output Parameters		+5V	+12V	-12V
Voltage Accuracy	min typ max	5.10 VDC 5.20 VDC 5.30 VDC	11.76 VDC 12.00 VDC 12.24 VDC	11.76 VDC 12.00 VDC 12.24 VDC
Rated Current	min max	350 mA 1000 mA	150 mA 200 mA	150 mA 200 mA
Load Regulation Min to Max Load	typ	0.6%	0.6%	0.6%
Line Regulation Vin = Min to Max VDC	typ max	0.05%	0.2%	0.2%
Noise, 0 to 20 MHz bw	typ max	60 mV p-p 100 mV p-p	10 mV p-p	10 mV p-p
General Specifications				
Isolation				
Isolation Voltage Input to Output	min	700 VDC		
Input to Output Capacitance	typ	250 pF		
Environmental				
Case Operating Temperature Range No Derating	min max	0°C 90°C		
Storage Temperature Range	min max	-55°C 105°C		

Model 12T5.7.12CD Specifications

Model		12T5.7.12CD		
Features		On/Off Function		
Power		13.0 Watts		
Input Parameters				
Voltage Range	min typ max	9.0 VDC 12.0 VDC 36.0 VDC		
Efficiency	typ	80%		
Switching Frequency	typ	200 kHz		
Output Parameters		+5V	+7V	+12V
Voltage Accuracy	min typ max	4.90 VDC 5.00 VDC 5.10 VDC	6.27 VDC 6.57 VDC 6.87 VDC	11.95 VDC 12.20 VDC 12.45 VDC
Rated Current	min max	200 mA 1400 mA	100mA 500 mA	20 mA 200 mA
Load Regulation Load = Min to Full Load	typ max	1.5% 2.5%	2.5% 3.5%	2.3% 3.5%
Line Regulation Vin = Min to Max VDC	typ max	0.2% 0.5%	0.4% 0.8%	0.2% 0.5%
Noise, 0 to 20 MHz bw	typ max	40 mV p-p 70 mV p-p	25 mV p-p 50 mV p-p	35 mV p-p 75 mV p-p
General Specifications				
On/Off Funtions				
On Logic Level	min max	4 VDC 10 VDC		
Off Logic Level	min max	0 VDC 1.0 VDC		
Converter Idle Current	typ	8 mA		
Isolation				
Isolation Voltage Input to Output	min	700 VDC		
I/O Capacitance	typ	400 pF		
Environmental				
Case Operating Temperature Range	min max	-40°C 85°C		
Storage Temperature Range	min max	-55°C 105°C		

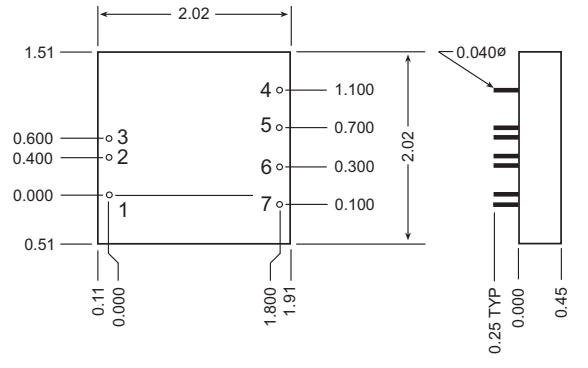
Model 5T5.12CD Case Dimension



XX.XX = ±0.02
XX.XXX = ±0.005

PIN	FUNCTION
1	+INPUT
2	-INPUT
3	-12V OUTPUT
4	+12V OUTPUT
5	OUTPUT CMN
6	+5.2V OUTPUT

Model 12T5.7.12CD Case Dimension



PIN	FUNCTION
1	ON/OFF
2	-INPUT
3	+INPUT
4	+12V OUTPUT
5	+5V OUTPUT
6	CMN
7	+7V OUTPUT

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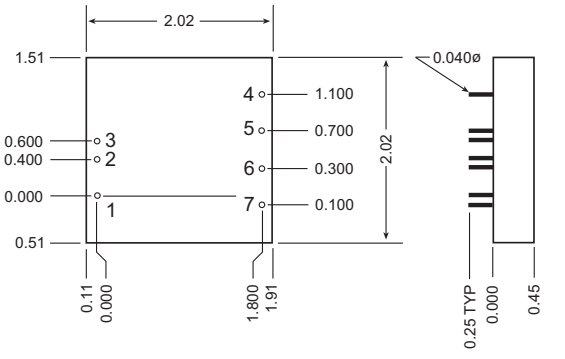
Model 48T5.15CD Specifications

Model		48T5.15CD		
Features		Wide Input Range		
Power		15.0 Watts		
Input Parameters				
Voltage Range	min typ max	18.0 VDC 48.0 VDC 72.0 VDC		
Efficiency Vin = 32V Vin = 48V Vin = 72V	 typ typ typ	 82.0% 80.0% 75.0%		
Switching Frequency	typ	220 kHz		
Output Parameters		+5V	+15V	-15V
Output Voltage,	min typ max	4.925 VDC 5.000 VDC 5.075 VDC	14.70 VDC 15.00 VDC 15.30 VDC	14.70 VDC 15.00 VDC 15.30 VDC
Rated Load	min max	150 mA 1500 mA	60 mA 250 mA	60 mA 250 mA
Load Regulation Load = Min to Full	typ max	1.2% 2.0%	1.2% 2.0%	2.0% 3.0%
Line Regulation Vin = Min to Max VDC	typ max	0.2% 0.5%	0.4% 1.0%	0.4% 1.0%
Noise, 0 to 20 MHz bw	typ	40 mV p-p		
General Specifications				
Isolation				
Isolation Voltage Input to Output 10µA Leakage	min	1544 VDC		
Input to Output Capacitance	typ	400 pF		
Environmental				
Case Operating Temperature Range No Derating	min max	-40°C 85°C		
Storage Temperature Range	min max	-55°C 105°C		

Model 48T5.15CD Case Dimension

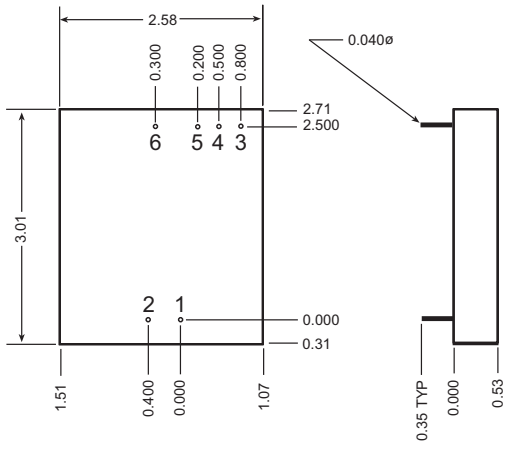


PIN	FUNCTION
1	CASE
2	-INPUT
3	+INPUT
4	+15V OUTPUT
5	+5V OUTPUT
6	CMN
7	-15V OUTPUT

Model 48T12.5CD Specifications

Model		48T12.5CD		
Features		Low Profile Case		
Power		28.5 Watts		
Input Parameters				
Voltage Range	min typ max	18.0 VDC 48.0 VDC 72.0 VDC		
Efficiency, Full Load	typ	83%		
Switching Frequency	typ	220 kHz		
Output Parameters		+5V	+12V	-5V
Output Voltage, Max Load	min typ max	4.95 VDC 5.00 VDC 5.05 VDC	11.60 VDC 12.00 VDC 12.40 VDC	4.8 VDC 5.00 VDC 5.20 VDC
Rated Load	min max	750 mA 3000 mA	250 mA 1000 mA	75 mA 300 mA
Load Regulation Load = Min to Max	typ max	0.7% 1.2%	1.7% 2.5%	4.0% 5.0%
Line Regulation Vin = Min to Max VDC	typ max	0.1% 0.5%	0.3% 0.5%	0.3% 0.5%
Noise, 0 to 20 MHz bw	typ max	50 mV p-p 100 mV p-p	35 mV p-p 70 mV p-p	50 mV p-p 120 mV p-p
General Specifications				
Isolation				
Isolation Voltage Input to Output	min	1544 VDC		
Input to Output Capacitance	typ	350 pF		
Environmental				
Case Operating Temperature Range No Derating	min max	-25°C 85°C		
Storage Temperature Range	min max	-40°C 105°C		

Model 48T12.5CD Case Dimension



Mechanical tolerances unless otherwise noted:
XX.XX = ±0.05
XX.XXX = ±0.005

PIN	FUNCTION
1	+INPUT
2	-INPUT
3	-12V
4	CMN
5	-5V
6	+5V

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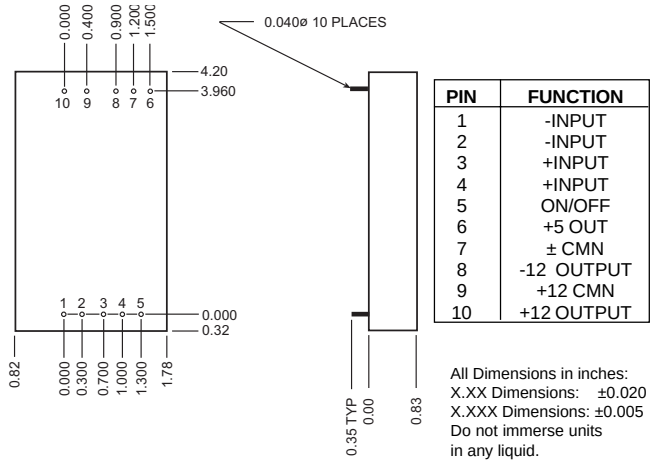
Model 12T12.5CD Specifications

Model		12T12.5CD		
Features		On/Off Function		
Power		92.5 Watts		
Input Parameters				
Voltage Range	min typ max	10.0 VDC 12.0 VDC 18.0 VDC		
Efficiency	typ	86%		
Switching Frequency	typ	100 kHz		
Output Parameters		+5V	+12V	-12V
Voltage Accuracy	min typ max	4.950 VDC 5.000 VDC 5.050 VDC	11.900 VDC 12.000 VDC 12.100 VDC	11.760 VDC 12.000 VDC 12.240 VDC
Rated Load Range	min max	200 mA 500 mA	0 mA 7300 mA	0 mA 200 mA
Load Regulation Min to Max Load	typ max	0.02% 0.2%		
Min to Typ Load	typ max		0.1% 0.5%	
Typ to Max Load	typ max		0.2% 0.7%	
100 mA to 200 mA Load	typ max			1.5% 3.0%
Line Regulation Vin = Min to Max VDC	typ max	0.02% 0.2%		0.3% 1%
at Typical Load	typ Max		0.01% 0.2%	
at Maximum Load	Max		0.5%	
Noise, 0 to 20 MHz bw +5 @ Max Load	typ max	25 mV p-p 75 mV p-p		
Typical Load	typ max		20 mV p-p 50 mV p-p	
Maximum Load	typ max		50 mV p-p 100 mV p-p	
-12 @ Max Load	typ max			20 mV p-p 50 mV p-p
General Specifications				
Environmental				
Case Operating Temperature Range No Derating	min max	-0°C 55°C		
Storage Temperature Range	min max	-25°C 90°C		

Model 12T12.5CD Case Dimension



PIN	FUNCTION
1	-INPUT
2	-INPUT
3	+INPUT
4	+INPUT
5	ON/OFF
6	+5 OUT
7	± CMN
8	-12 OUTPUT
9	+12 CMN
10	+12 OUTPUT

All Dimensions in inches:
X.XX Dimensions: ±0.020
X.XXX Dimensions: ±0.005
Do not immerse units in any liquid.

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